

IN THE CLAIMS

Please delete claims 1-3 and add the following new claims:

4. A user interface system comprising:

a plurality of nodes organized into a graph of information wherein at least one node is a source node having focus, and one or more nodes forming a sub-hierarchy of the source node and represented in a view in relation to the source node by inclusion, and where one or more nodes connecting to the focus are represented in relation to the focus in a manner adjacent to the focus,

a means for rendering nodes that operates according to a set of parameters that define the representation and position of nodes in the view, such that the nodes connected to the focus are represented in a view in an adjacent relation to the focus, and where the one or more nodes forming a sub-hierarchy of the source node is represented in a view in relation to the source node by inclusion.

5. The user interface of claim 4, wherein the means for rendering nodes also defines the representation of links that connect one node to another node, and where one of the parameters in the set defining the representation and position of nodes in the view, relates to the angular range and effects the positions of individual branches, links and positions of relational nodes.

6. The user interface of claim 4, wherein the means for rendering nodes also defines the representation of links that connect one node to another node, and where one of the parameters in the set defining the representation and position of nodes in the view, relates to the angular center and effects the positions of individual branches, links and positions of relational nodes.
7. The user interface of claim 4, wherein the means for rendering nodes is capable of producing a visual cue to the user to indicate that a node in the view is connected to other nodes that are not displayed in the view.
8. The user interface of claim 4, wherein the means for rendering nodes is capable of producing a scaled representation of adjacent nodes in the system whereby according to a context-to-focus parameter, the scale adjustment of adjacent nodes in relation to the scale of the focus node is produced.
9. The user interface of claim 4, wherein the means for rendering nodes is capable of producing a fractal or radial relational view.
10. The user interface of claim 9, wherein the radial view produces nodes arranged in concentric circles.

11. The user interface of claim 4, wherein the means for rendering nodes is capable of producing a view selected from the group consisting of hierarchical, relational and mixed.
12. The user interface of claim 4, wherein a mixed view is selected and the means for rendering nodes produces nodes that appear to float above other nodes.
13. The user interface of claim 4, wherein the means for rendering nodes produces a representation of nodes according to a minimum node size.
14. The user interface of claim 4, wherein the means for rendering nodes in the view with a node to indicate that the node contains sub-hierarchy that is completely hidden.
15. The user interface of claim 4, wherein the means for rendering nodes in the view produces a representation of nodes using visual cues to facilitate user navigation in the system.
16. The user interface of claim 4, wherein the user adjustment of one or more parameters results in the display of few or many nodes to simplify exploration or facilitate an individual's understanding of the entire hierarchy of information, respectively.

17. The user interface of claim 4 wherein the graph of information relates to a member of the set consisting of query result set from database engine, query result set from internet search engine and file store.

18. The user interface of claim 4, wherein a parameter in the set used to render the representation of nodes in the view is selected from the group consisting of relational angular range, relational angular center, adjacency border ratio, context-to-focus ratio, maximum relational path length, relational layout, link-to-node ratio, view mode, multiple instance hiding flag, and maximum arrowhead path distance.

19. The user interface of claim 4, wherein a user may select a node in the view to designate the selected node as the new focus node.

20. The user interface of claim 19, wherein upon selection of a node in the view, the means for rendering nodes in the view produces an animation showing the transition from the original focus to the new focus node.

21. A user interface system comprising:

a plurality of nodes organized into a graph of information wherein at least one node is a source node having focus, and one or more nodes forming a sub-hierarchy of the source node and represented in a view in relation to the source node by inclusion, and where

one or more nodes connecting to the focus are represented in relation to the focus in a manner adjacent to the focus,

a means for rendering nodes that operates according to a set of parameters that define the representation and position of nodes in the view, such that the nodes connected to the focus are represented by a visual cue in a view in an adjacent relation to the focus and according to the parameters, and where the one or more nodes forming a sub-hierarchy of the source node is represented by a visual cue in a view in relation to the source node by inclusion according to the parameters, and

wherein a user may select a node in the view to designate the selected node as the new focus node.

22. The user interface of claim 21, wherein the means for rendering nodes also defines the representation of links that connect one node to another node, and where one of the parameters in the set defining the representation and position of nodes in the view, relates to the angular range and effects the positions of individual branches, links and positions of relational nodes.

23. The user interface of claim 21, wherein the means for rendering nodes also defines the representation of links that connect one node to another node, and where one of the parameters in the set defining the representation and position of nodes in the view,

relates to the angular center and effects the positions of individual branches, links and positions of relational nodes.

24. The user interface of claim 21, wherein the means for rendering nodes is capable of producing a visual cue to the user to indicate that a node in the view is connected to other nodes that are not displayed in the view.

25. The user interface of claim 21, wherein the means for rendering nodes is capable of producing a scaled representation of adjacent nodes in the system whereby according to a context-to-focus parameter, the scale adjustment of adjacent nodes in relation to the scale of the focus node is produced.

26. The user interface of claim 21, wherein the means for rendering nodes is capable of producing a fractal or radial relational view.

27. The user interface of claim 21, wherein the radial view produces nodes arranged in concentric circles.

28. The user interface of claim 21, wherein the means for rendering nodes is capable of producing a view selected from the group consisting of hierarchical, relational and mixed.

29. The user interface of claim 21, wherein a mixed view is selected and the means for rendering nodes produces nodes that appear to float above other nodes.

30. The user interface of claim 21, wherein the means for rendering nodes produces a representation of nodes according to a minimum node size.

31. The user interface of claim 21, wherein the means for rendering nodes in the view with a node to indicate that the node contains sub-hierarchy that is completely hidden.

32. The user interface of claim 21, wherein the means for rendering nodes in the view produces a representation of nodes using visual cues to facilitate user navigation in the system.

33. The user interface of claim 21, wherein the user adjustment of one or more parameters results in the display of few or many nodes to simplify exploration or facilitate an individual's understanding of the entire hierarchy of information, respectively.

34. The user interface of claim 21 wherein the graph of information relates to a member of the set consisting of query result set from database engine, query result set from internet search engine and file store.

35. The user interface of claim 21, wherein a parameter in the set used to render the representation of nodes in the view is selected from the group consisting of relational angular range, relational angular center, adjacency border ratio, context-to-focus ratio, maximum relational path length, relational layout, link-to-node ratio, view mode, multiple instance hiding flag, and maximum arrowhead path distance.